

IN THE CLAIMS

1-5. canceled

6. (new) A heater chip for thermocompression bonding comprising:

a heater chip for thermocompression bonding wherein a small projection-like thermocompression bonding portion heated up by conduction resistance is provided on a head end of a small plate-like body, which is made of tungsten series alloy, the head end having a reduced width with respect to the small plate-like body,

a cut provided in the body, from the base end side toward a vicinity of the thermocompression bonding portion, both sides of the cut serving as a conduction terminal portion,

a thermocouple for a temperature detecting portion installed in the vicinity of the thermocompression bonding portion,

a dilated trapezoidal cut provided at one end of the cut,

a projection portion for thermo-welding with a length of 0.4 millimeter or more provided opposite to the thermocompression bonding portion,

the temperature-detecting portion comprising each end of two conducting wires thermally welded to the projection portion to create the thermocouple, the thermal welding being characterized in that a wet melting portion spreads and covers up top and bottom ridges of a head area of the projection portion.

7. (new) The heater chip for thermocompression bonding of claim 6, wherein a small cut is provided nearly at the midpoint of the cut in a longitudinal direction so that the two conducting wires of the thermocouple can be inserted and supported with a

Application No.: 10/568,591

protection tube.